

Hybrid Neural Network Generation System and Method

Abstract

A computer-implemented method and system for building a neural network is disclosed. The neural network predicts at least one target based upon predictor variables defined in a state space. First, an input data set is retrieved that includes the predictor variables and at least one target associated with the predictor variables for each observation. In the state space, a number of points is inserted in the state space based upon the values of the predictor variables. The number of points is less than the number of observations. A statistical measure is determined that describes a relationship between the observations and the inserted points. Weights and activation functions of the neural network are determined using the statistical measure.